

Schedule of Events

**Talks will be held in the St. Charles Ballroom.
Posters will be displayed in the Mega Center.**

Thursday, March 12

2:30 PM – 6:00 PM	OPTIONAL PRE-CONFERENCE WORKSHOPS	
2:30 PM – 3:00 PM	A Quick Tour of Araport: the Arabidopsis Information Portal (Ruby Room)	
3:00 PM – 4:00 PM	"Gene Tagging with Green Ds" Maize workshop (Ruby Room)	
4:00 PM – 5:00 PM	MaizeGDB Basics workshop (Ruby Room)	
5:00 PM – 6:00 PM	MaizeGDB Advanced Usage workshop (Ruby Room)	
	<i>Pre-registration recommended for the above sessions.</i>	
3:00 PM – 8:30 PM	REGISTRATION (Near Main Lobby)	
3:00 PM – 6:00 PM	POSTER HANGING (Mega Center)	
6:00 PM – 7:00 PM	DINNER (Mega Center)	
7:00 PM – 9:00 PM	SESSION 1 – PLENARY TALKS Chair: Mark Settles	
7:00 PM	WELCOME AND ANNOUNCEMENTS Mark Settles	(St. Charles Ballroom)
7:15 PM	Paula McSteen, University of Missouri <i>Auxin and maize inflorescence development</i>	[Plen 1]
8:05 PM	Xuemei Chen, University of California, Riverside <i>Small RNAs, a fascinating part of the transcriptome</i>	[Plen 2]
9:00 PM – 10:00 PM	REGISTRATION (Mega Center)	
9:00 PM – 1:00 AM	INFORMAL POSTER VIEWING & HOSPITALITY (Mega Center)	

Friday, March 13

7:00 AM – 8:00 AM **BREAKFAST** (Mega Center)
7:00 AM – 8:15 AM **REGISTRATION** (Mega Center)

8:00 AM – 10:15 AM SESSION 2 - BIOCHEMICAL GENETICS Chair: Wes Bruce

8:00 AM **ANNOUNCEMENTS** (St. Charles Ballroom)
Mark Settles

8:15 AM **Vinzenz Handrick, Max Planck Institute for Chemical Ecology** [T1]
Elucidation of the final steps of benzoxazinoid formation in maize

8:35 AM **Vered Tzin, Boyce Thompson Institute for Plant Research** [T2]
Characterization of biological processes occurring in maize leaves in response to aphid feeding

8:55 AM **Shawn Christensen, USDA-ARS** [T3]
The maize death acids, 10-oxo-11-phytoenoic acid and derivatives, demonstrate specificity in jasmonate-related signaling and defense

9:15 AM **Guan-Feng Wang, North Carolina State University** [T4]
Molecular and Functional Analyses of a Maize Autoactive NB-LRR Protein Identify Precise Structural and Subcellular Requirements for Activity

9:35 AM **Junya Zhang, University of Florida** [T5]
The maize defective kernel5 (dek5) locus encodes a chloroplast-localized protein required for plastid division, membrane stability, and starch accumulation

9:55 AM **R. Frank Baker, University of Missouri** [T6]
Localization of maize SUCROSE TRANSPORTER1 reveals novel insights into phloem loading and sucrose retrieval

10:15 AM **BREAK**

10:45 AM – 12:25 PM SESSION 3 – MOLECULAR GENETICS Chair: Petra Wolters

10:45 AM **Peng Yu, University of Bonn** [T7]
Local high nitrate modulates auxin transport in maize leading to altered lateral root initiation

11:05 AM **Neil Robbins, Stanford University** [T8]
Root hydropatterning: local water availability acts as a signal for lateral root initiation

11:25 AM **Rentao Song, Shanghai University** [T9]
Genome-wide characterization of cis-acting DNA targets reveals the transcriptional regulatory framework of Opaque2 in maize

11:45 AM **Erich Grotewold, Ohio State University** [T10]
Combinatorial Gene Regulation by R is Modulated by Small Molecule Interactions

12:05 PM **John Gray, University of Toledo** [T11]
The Maize TFome - development of a transcription factor open reading frame collection for functional genomics

Friday, March 13 (continued)

12:30 PM – 1:30 PM **LUNCH** (Mega Center)

1:30 PM – 5:00 PM **POSTER SESSION 1** (Mega Center)

1:30 PM – 3:00 PM *Presenters should be at odd numbered posters.*

3:00 PM – 4:30 PM *Presenters should be at even numbered posters.*

Beverages will be available from 3:30 PM to 5:00 PM.

4:40 PM – 6:00 PM **SESSION 4 – GENOME EDITING WORKSHOP**
Chair: David Jackson

4:40 PM **David Jackson, Cold Spring Harbor Laboratory**
Introduction to Genome Editing

4:45 PM **Stephen Novak, Dow AgroSciences** [W1]
A Modular and Flexible Gene Targeting System for Multigenerational Transgene Stacking in Plants

5:00 PM **Bing Yang, Iowa State University** [W2]
CRISPR/Cas9- and TALEN-mediated mutagenesis in rice and maize

5:15 PM **Jinjie Zhu, China Agricultural University** [W3]
Highly efficient and heritable targeted genome editing in maize using CRISPR-Cas9

5:30 PM **Mark Cigan, DuPont Pioneer** [W4]
CRISPR-Cas genome editing in maize

5:45 PM **Panel Discussion**

6:00 PM – 7:00 PM **DINNER** (Mega Center)

7:00 PM – 9:00 PM **SESSION 5 – MCCLINTOCK PRIZE PRESENTATION**
Chair: Carolyn Lawrence

7:00 PM **Carolyn Lawrence, Iowa State University**
McClintock Prize Presentation

7:30 PM **Sue Wessler, University of California at Riverside** [M1]
The Success Strategies of a Bursting Transposon

9:00 PM – 1:00 AM **INFORMAL POSTER VIEWING & HOSPITALITY**
(Mega Center)

Saturday, March 14

7:00 AM – 8:00 AM **BREAKFAST** (Mega Center)

8:00 AM – 10:15 AM SESSION 6 – CYTOGENETICS & GENOMICS Chair: Ruairidh Sawers

8:00 AM **ANNOUNCEMENTS** (St. Charles Ballroom)
Mark Settles

8:15 AM **Wojtek Pawlowski, Cornell University** [T12]
Genomic features shaping the landscape of recombination hotspots in maize

8:35 AM **Fangpu Han, Chinese Academy of Sciences** [T13]
De novo centromere formation in maize

8:55 AM **Hank Bass, Florida State University** [T14]
Linking Chromatin Structure to Genomic Function through Differential Nuclease Sensitivity (DNS-seq) and Nucleosome Occupancy Mapping

9:15 AM **Candice Hirsch, University of Minnesota** [T15]
Insights into the relationship between structural diversity and transcriptional diversity in maize

9:35 AM **Gil Ronen, NRGene** [T16]
Comparing several maize reference genomes as a tool to discover conserved and variable key genetic elements in maize

9:55 AM **Robert Schaefer, University of Minnesota** [T17]
Integrating tissue specific co-expression networks with NAM GWAS to prioritize candidate gene sets

10:15 AM – 10:45 AM **BREAK**

10:45 AM – 12:25 PM SESSION 7 – CELL & DEVELOPMENTAL BIOLOGY Chair: Amanda Wright

10:45 AM **Byoung Il Je, Cold Spring Harbor Laboratory** [T18]
The maize FASCIATED EAR3 gene reveals a new CLAVATA signaling system, and controls ear size and stem cell proliferation by signaling from differentiating cells

11:05 AM **Samuel Leiboff, Cornell University** [T19]
Natural variation of maize shoot apical meristem morphology

11:25 AM **Sivanandan Chudalayandi, Iowa State University** [T20]
Cytokinin hypersignaling reprograms maize proximal-distal leaf patterning

11:45 AM **Katherine Petsch, Cold Spring Harbor Laboratory** [T21]
A novel DICER-LIKE1 pathway in maize buffers for loss of DICER-LIKE4 in tasiR-ARF biogenesis

12:05 PM **Michelle Facette, University of California, San Diego** [T22]
The SCAR/WAVE complex polarizes PAN receptors and promotes division asymmetry in maize

Saturday, March 14 (continued)

12:30 PM – 1:30 PM	LUNCH (Mega Center)	
1:30 PM – 5:00 PM	POSTER SESSION 2 (Mega Center)	
1:30 PM – 3:00 PM	<i>Presenters should be at even numbered posters.</i>	
3:00 PM – 4:30 PM	<i>Presenters should be at odd numbered posters.</i>	
<i>Beverages will be available from 3:30 PM to 5:00 PM.</i>		
5:00 PM – 6:00 PM	COMMUNITY SESSION - Maize Genetics Executive Committee MGEC Chair: Carolyn Lawrence (St. Charles Ballroom)	
6:00 PM – 7:00 PM	DINNER (Mega Center)	
7:00 PM – 8:55 PM	SESSION 8 – PLENARY TALKS Chair: Jinsheng Lai	
7:15 PM	Dirk Inzé, Ghent University, Belgium <i>Plant growth beyond limits</i>	[Plen 3]
8:05 PM	Shawn Kaeppler, University of Wisconsin-Madison <i>Tuning developmental timing to maximize maize productivity</i>	[Plen 4]
9:00 PM – 2:00 AM	INFORMAL POSTER VIEWING / DANCE (Mega Center)	

Sunday, March 15

7:00 AM – 8:20 AM **BREAKFAST** (Mega Center)

Posters should be taken down by 9 am!

8:20 AM – 9:50 AM **SESSION 9 – QUANTITATIVE GENETICS & BREEDING** Chair: Sherry Flint-Garcia

8:20 AM **ANNOUNCEMENTS** (St. Charles Ballroom)
Mark Settles

8:30 AM **Randy Wisser, University of Delaware** [T23]
Macroscopic microscopy: elucidating mechanisms of pathogen resistance for genes associated with quantitative defense

8:50 AM **Timothy Beissinger, University of California, Davis** [T24]
Patterns of demography and selection since maize domestication

9:10 AM **Xufeng Wang, China Agricultural University** [T25]
Dissecting the regulatory divergence between maize and its progenitor, teosinte

9:30 AM **Seth Murray, Texas A&M University** [T26]
Multi-parent and intermating population design effects on genetic mapping resolution of major color genes

9:50 AM **BREAK**

10:20 AM – 11:30 AM **SESSION 10 – TRANSPOSONS & EPIGENETICS** Chair: David Braun

10:20 AM **Elizabeth Buescher, Purdue University** [T27]
mop1 impacts the maternal contribution to maize seed

10:40 AM **Jonathan Gent, University of Georgia** [T28]
RNA-directed DNA methylation in suppression of intronic transposons: minimizing collateral damage on host gene expression?

11:00 AM **Erik Vollbrecht, Iowa State University** [T29]
Ds mutagenesis and a de novo W22 genome sequence

11:30 AM **ADJOURNMENT**